

What is claimed is:

1. A data transmission method comprising the steps  
of:
  - transmitting transmission data containing content  
5 data and auxiliary data provided for signal processing at  
the viewer end,
  - receiving said transmitted transmission data at  
said viewer end,
  - performing a second signal processing using  
10 content data of the result of a desired first signal  
processing performed based on data recorded in advance and  
said content data contained in said received transmission  
data based on said auxiliary data contained in said  
received transmission data to create new output content  
15 data, and
  - outputting the output content data.
2. A data transmission method as set forth in claim  
1, wherein
  - said transmission data contains said content data  
20 and command data for controlling said second signal  
processing at the viewer end and
  - said second signal processing is performed using  
content data of the result of said first signal processing  
and said content data contained in said received  
25 transmission data based on command data contained in said

received transmission data to create new output content data at said viewer end.

3. A data transmission method as set forth in claim 2, wherein

5           said transmission data further contains any data provided for creation of said output content data at the viewer end and

          said second signal processing is performed using the content data of the result of said first signal processing and said any data contained in said received transmission data based on a command contained in said received transmission data to create new output content data.

10           4. A data transmission method as set forth in claim 1, wherein said viewer end combines content data of the result of said first signal processing and said content data contained in said received transmission data to create new output content data.

20           5. A data transmission method as set forth in claim 4, wherein

          the content data of the result of said first signal processing at the view end contains data of any game character and

          said viewer end replaces video data of a  
25   predetermined object contained in said received

transmission data with data of the game character of the result of said first signal processing to create new output content data.

6. A data transmission method as set forth in claim  
5 1, wherein

said transmission data contains advertisement data as one or both of said content data and auxiliary data and

10 said viewer end combines content data of the result of said first signal processing and said advertisement data contained in said received transmission data to create and output content data.

7. A data transmission method as set forth in claim  
6, wherein

15 said transmission data contains a plurality of said advertisement data and

said viewer end selectively combines one or more of any of said plurality of advertisement data with content data of the result of said first signal processing.

20 8. A data transmission method as set forth in claim 1, further comprising the steps of

transmitting data from said viewer end to transmitting end and

25 creating content data for transmission based on said transmitted data at the transmitting end.

9. A data transmission method as set forth in claim 1, wherein

said transmission data contains command data for controlling said first signal processing at the viewer end,

5        said first signal processing is controlled at said viewer end based on commands contained in said received transmission data, and

10        said output content data is created based on content data of the result of said controlled first signal processing.

10. A data transmission system having a transmitter for transmitting transmission data and a plurality of viewer apparatuses for receiving the transmitted data, wherein

15        said transmitter transmits transmission data containing content data and auxiliary data provided for the processing in said viewer apparatuses, and

each said viewer apparatus comprises

20        a receiving means for receiving said transmitted transmission data,

an operating means for the viewer to perform an operation and outputting an operation signal based on the related operation,

25        a first signal processing means for performing a desired signal processing according to software stored in

advance and said operation signal to output content data including video data,

a second signal processing means for performing a predetermined processing on the content data output from said first signal processing means and said content data contained in said received transmission data using said auxiliary data contained in said received transmission data so as to create output content data, and

an outputting means for outputting said created output content data.

11. A data transmission system as set forth in claim 10, wherein

said transmission data contains said content data and command data for controlling said second signal processing means of said viewer apparatus and

said second signal processing means of said viewer apparatus performs signal processing based on said command data on content data of the result of said first signal processing and said content data contained in said received transmission data to create said output content data.

12. A data transmission system as set forth in claim 10, wherein

said viewer apparatus further has a transmitting means for transmitting desired data to said transmitter and

said transmitter prepares content data for transmission based on said transmitted data.

13. A data transmission system as set forth in claim 10, wherein

5 the content data output from the first signal processing means of said viewer apparatus is data of any game character and

10 the second signal processing means of said viewer apparatus replaces video data of a predetermined object contained in said received transmission data with data of said game character output from said first signal processing means to create new output content data.

14. A data transmission system as set forth in claim 10, wherein

15 said transmission data contains advertisement data as one or both of said content data and auxiliary data and

20 said second signal processing means of said viewer apparatus combines content data output from said first signal processing means and advertisement data contained in said received transmission data to create and output content data.

15. A data transmission system as set forth in claim 14, wherein

25 said transmission data contains a plurality of

advertisement data and

said second signal processing means of said  
viewer apparatus selectively combines one or more of any of  
the plurality of advertisement data with content data  
5 output from said first signal processing means.

16. A data transmission system having a transmitter  
for transmitting transmission data and a plurality of  
viewer apparatuses for receiving the transmitted data,  
wherein

10 said transmitter transmits transmission data  
containing content data including video data and command  
data for controlling the receiver end viewer apparatuses,  
and

each said viewer apparatus comprises  
15 a receiving means for receiving said transmitted  
transmission data,

a signal processing means for performing desired  
signal processing according to software stored in advance  
and operations of the viewer and outputting content data  
20 including video data,

a signal combining means for combining the video  
data of said content data contained in said received  
transmission data with a predetermined region of the video  
data of the content data output from said signal processing  
25 means to create said output content data containing new

video data, and

an outputting means for outputting said created  
output content data.

17. A data transmission system as set forth in claim  
5 16, wherein

said content data contained in said transmission  
data is data relating to an advertisement and

said signal combining means of said viewer  
apparatus combines video data relating to said  
10 advertisement contained in said received transmission data  
with a predetermined region of video data of content data  
output from said first signal processing means to create  
said output content data containing new video data.

18. A data transmission system as set forth in claim  
15 17, wherein

said transmission data contains a plurality of  
advertisement data and

said signal combining means of said viewer  
apparatus selectively combines one or more of any of said  
20 plurality of advertisement data with content data output  
from said first signal processing means.

19. An information processing method comprising the  
steps of

having the transmitting end create content data  
25 and transmit transmission data containing the content data



and auxiliary data provided for the signal processing on the viewer end,

having a viewer end receive said transmitted transmission data,

5           perform a desired first signal processing performed based on data stored in advance at the viewer end,

10           process the content data obtained as the result of said first signal processing and said content data contained in said received transmission data by second signal processing using said auxiliary data contained in said received transmission data to create new output content data,

15           output the output content data, and transmit data of at least one of the result of said first signal processing and the result of said second signal processing from said viewer end to the transmitting end, and

20           having said transmitting end perform a desired information processing based on said transmitted data to create content data for transmission based on said information processing result.

25           20. An information processing system having a transmitter for transmitting transmission data and a plurality of viewer apparatuses for receiving the

transmitted data, wherein

said transmitter has

a content data creating means for creating the  
content data,

5 a transmitting means for transmitting  
transmission data containing said created content data and  
auxiliary data provided for signal processing on the viewer  
end, and

an information processing means for performing a  
10 desired information processing based on the data  
transmitted from said viewer apparatuses,

said content data creating means creates said  
content data to be transmitted based on said information  
processing result,

15 said each of said viewer apparatuses has  
a receiving means for receiving said transmitted  
transmission data,

a first signal processing means for performing a  
desired first signal processing based on data stored in  
20 advance,

a second signal processing means for processing  
the content data obtained as the result of said first  
signal processing and said content data contained in said  
received transmission data by second signal processing  
25 using said auxiliary data contained in said received

transmission data to create new output content data,

an outputting means for outputting said created output content data, and

a transmitting means for transmitting at least  
5 one of the result of said first signal processing and the  
result of said second signal processing to said  
transmitter.

21. A data transmitter having

a transmission data creating means for creating  
10 transmission data containing content data and auxiliary  
data provided for predetermined signal processing in a  
viewer apparatus and

a transmitting means for transmitting said  
created transmission data to a plurality of viewer  
15 apparatuses.

22. A data transmitter as set forth in claim 21,  
wherein, when the viewer apparatus is a predetermined  
apparatus which performs a desired first signal processing  
in accordance with software stored in advance, performs a  
predetermined second signal processing on content data  
20 obtained from said first signal processing and content data  
contained in said transmitted transmission data, and  
outputs output contents data obtained as a result of said  
signal processing, said transmission data creating means  
25 creates said transmission data containing command data for

controlling one or both of the first signal processing and second signal processing in said auxiliary data.

23. A data transmitter as set forth in claim 21, further provided with

5 a receiving means for receiving data transmitted from said viewer apparatuses and

a computer means for collecting received data transmitted from a plurality of said viewer apparatuses and performing a desired computation and wherein

10 said transmission data creating means creates said transmission data based on said received data or the result of said computation.

24. A data transmitter as set forth in claim 21, wherein said transmission use creating means creates said  
15 transmission data containing program data containing video data and information for replacing a predetermined object in said video data with another object.

25. A data transmitter as set forth in claim 21, wherein said transmission data creating means has one or  
20 more advertisement data of a form for viewing combined with any video data as one or both of said content data and auxiliary data.

26. A signal processor for receiving transmitted transmission data containing content data and predetermined  
25 auxiliary data, comprising

a receiving means for receiving said transmitted transmission data,

a first signal processing means for performing a desired signal processing according to software stored in advance and operations of a viewer and outputting content data containing video data,

a second signal processing means for processing the content data output from said first signal processing means and said content data contained in said received transmission data by predetermined processing using said auxiliary data contained in said received transmission data to create output content data, and

an outputting means for outputting said created output content data.

27. A signal processor as set forth in claim 26, wherein one or both of said first signal processing means and said second signal processing means controls processing based on command data contained in said auxiliary data of said transmission data.

28. A signal processor as set forth in claim 26, wherein said second signal processing means combines video data of content data output from said first signal processing means with a predetermined region of video data of said content data contained in said received transmission data to create output content data containing

new video data.

29. A signal processor as set forth in claim 28,  
wherein

the content data output from said first signal  
5 processing means is data of any game character and  
said second signal processing means replaces  
video data of a predetermined object contained in said  
received transmission data with the data of said game  
character output from said first signal processing means to  
10 create new output content data.

30. A signal processor as set forth in claim 26,  
wherein said second signal processing means combines video  
data of said content data contained in said received  
transmission data with a predetermined region of video data  
15 of content data output from said first signal processing  
means.

31. A signal processor as set forth in claim 30,  
wherein said second signal processing means combines  
content data output from said first signal processing means  
20 and advertisement data contained in said received  
transmission data to create output content data.

32. A signal processor as set forth in claim 31,  
wherein said second signal processing means combines  
selectively one or more of any of a plurality of  
25 advertisement data contained in said received transmission

data with content data output from said first signal processing means.

33. A signal processor as set forth in claim 26, further provided with a transmitting means for transmitting  
5 desired data to a source of transmission of said transmission data.

34. A content data processing method comprising the steps of

receiving as input first content data obtained  
10 from a first medium, second content data obtained from a second medium, and auxiliary data provided for signal processing obtained from a third medium different from said second medium and

performing signal processing with respect to at  
15 least said second content data by using said auxiliary data to create third content data.

35. A data content processing method as set forth in claim 34, wherein each of said media is one of a wireless, wired, and physical storage medium.

20 36. A data serving method comprising the step of providing first content data, second content data, and auxiliary data for controlling signal processing performed with respect to at least said second content data to create new content data to terminal apparatus.

25 37. A data serving method as set forth in claim 36,

wherein said first content data and said second content data are provided to a terminal apparatus through different media.

38. A data serving method as set forth in claim 36,  
5 wherein said first content data and said second content data are provided to a terminal apparatus through the same medium.

39. A data serving method as set forth in claim 36,  
10 wherein said second content data are provided before providing said first content data.